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ABSTRACT

A questionnaire was developed and administered to 104 students who had enrolled in the college's five instructional radio courses; 51 percent responded. Selected personal and demographic characteristics of enrollees were identified, attitudes toward radio courses were determined, and certain technical aspects of the courses were discerned. Approximately 82 percent of the respondents enrolled in the courses to earn a certificate, diploma, or associate or higher degree. Approximately 54 percent of the respondents were employed in the fields of law enforcement. The respondents indicated extremely high ratings for the following aspects of the radio courses: academic instruction, instructor's delivery, grading procedures, length of lectures, availability of instructor, technical quality of programs, and radio reception. Seventy percent of the respondents said that the radio course was related to their proposed future employment or study. A significant number (24 percent) of the respondents supplemented the radio broadcast by utilizing the college's learning laboratory to listen to the programs. Results are tabulated and appended, and recommendations include: better coordination of nontraditional course offerings, and a more efficient method of selecting courses and instructors. (Author/NHM)

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AN EVALUATION OF INSTRUCTIONAL RADIO COURSES AT VIRGINIA WESTERN COMMUNITY COLLEGE

OIR 31-75

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TABLE OF CONTENTS

	Page
LIST OF TABLES	ii
INTRODUCTION	1
PURPOSE OF THE STUDY	2
OBJECTIVES OF THE STUDY	2
METHODOLOGY	4
THE STUDY POPULATION	4
THE SURVEY INSTRUMENT	4
PROCEDURES OF THE STUDY	4
PERCENT OF RETURNS	5
RESULTS	5
PERSONAL AND DEMOGRAPHIC CHARACTERISTICS OF STUDENTS	6
ATTITUDES AND OPINIONS OF THE STUDENTS	10
TECHNICAL ASPECTS OF INSTRUCTIONAL RADIO COURSES	12
COMMENTS AND OPINIONS OF RESPONDENTS	14
OBSERVATIONS AND COMMENTS BY WVWR-FM STATION MANAGER	12
SUMMARY OF OBSERVATIONS	20
SUMMARY AND RECOMMENDATIONS	21
SUMMARY	21
RECOMMENDATIONS	23
APPENDICES	24
APPENDIX A - QUESTIONNAIRE	25
APPENDIX B - OPEN FORM RESPONSE	28
APPENDIX C - NONRESPONSE BIAS	30

LIST OF TABLES

Table		Page
1	Return Rate By Contact Number	5
2	Sex and Marital Status	6
3	Distance From the College	7
4	Highest Educational Levels of the Respondents	7
5	Primary Educational Goals of the Respondents	8
6	Occupational Status of the Respondents	8
7	Respondents' Rating of Certain Aspects of the Instructional Radio Courses	10
8	Relationship of Course to Later Employment or Study	11
9	Respondents' Opinions on Certain Technical Aspects of the Instructional Radio Courses	12
10	Most Convenient Broadcast Time	13
11	Place That Respondents Listened to Broadcasts	13

INTRODUCTION

In January 1972 discussions were held by Virginia Western Community College's (VWCC) administration on how to reach out in the community and thus expand community services. One suggestion was to establish a non-commercial radio station that would offer an informational, educational, and cultural service not presently available in the Roanoke area. It was found that many colleges and universities in the United States were operating full-service public radio stations as a community service. Planning proceeded on the proposal and costs were computed. Since the College was fortunate in having on its faculty persons with experience in public broadcasting and broadcast engineering, plans were expedited at a low cost.

After a detailed written proposal was prepared by the College's staff, Dr. Harold H. Hopper, VWCC's President, approved the project and submitted the proposal to the State Board for Community Colleges and the Chancellor of the Virginia Community College System for their approval. A consulting engineer was retained to conduct a frequency search and prepare the necessary engineering exhibits. In July 1972 an application was filed with the Federal Communications Commission (FCC) for a construction permit. In December of that year, the FCC granted a construction permit which allowed the construction of the broadcast facility and the installation of equipment. WVWR-FM, a non-commercial public radio station, went on the air August 1, 1973. The station is now in the process of increasing its power from 4,110 watts to 100,000 watts in order to serve additional community colleges and an expanded regional audience.

Purpose of the Study

In September 1973, VWCC began an experimental series of instructional radio classes in order to determine the feasibility and effectiveness of instruction by radio. Courses that were offered by radio through the spring of 1975 included the following:

1. HIST 101-102-103: History of Western Civilization
2. LWNF 228: Law Enforcement and the Community
3. GOVT 18C: American Constitutional Government
4. ENGL 271-272-273: Survey of World Literature
5. MUSC 121-122-123: Music Appreciation

Although a great deal was learned in preparing and offering these courses, certain basic student information was needed in order to develop the short- and long-range goals and objectives of the instructional radio courses. Therefore, it was proposed that a survey of opinions and attitudes of students enrolled in the instructional radio courses were needed for future decision-making. Since VWCC's Office of Institutional Research had completed several survey research studies, follow-up procedures were developed and conducted by this Office.

Objectives of the Study

Four major objectives of the study were identified:

A. To identify selected personal and demographic characteristics of students who enrolled in courses offered by radio:

   1. What were the characteristics of these students in terms of sex and marital status?

   2. What were the highest educational levels of these students?

3. How far did the students live from the College?

4. What were the occupational classifications of these students?

B. To study the attitudes and opinions of the students toward instructional radio courses:

1. What were the students' ratings of academic instruction, course interest, instruction's delivery, usefulness of text and supplemental materials, length of lectures, etc.?

2. Was the course related to the students' employment or studies?

3. What was the students' primary educational goals in taking the radio courses?

4. Would the students enroll in other courses offered by radio?

C. To discern certain technical aspects of instructional radio courses:

1. When did the students listen to the broadcasts?

2. Did the students utilize VWCC's Learning Laboratory to listen to the instructional programs?

3. Did the students tape the programs?

4. What were the most convenient time schedules for the broadcasts?

5. Where did the students listen to the broadcasts?

D. To identify all comments and opinions that the students cared to make about their courses of study:

1. Were there certain comments that were cited by several students?

2. Were there comments that can improve certain aspects of the instructional programs?

METHODOLOGY

The methodology identified the study population, the survey instrument, the procedures, and the percent of returns of the study.

The Study Population

The study population consisted of 104 students who had enrolled in the instructional radio courses. This population was identified from the official records of VWCC's Office of Admission and Records. Mail labels were provided by VWCC's Department of Data Processing.

The Survey Instrument

The survey instrument consisted of a questionnaire (Appendix A) developed by VWCC's Office of Institutional Research with special inputs from Chris J. Ryg, WVWR-FM Station Manager. This questionnaire was developed to elicit information that would provide opinions and inputs to answer the specific research questions identified previously in the objectives of the study.

Procedures of the Study

Three mailing contacts were used in order to maximize the rate of returns of the study. The mailing sequence of these contacts were cited as follows:

Contact Number	Nature of Contact	Contact Interval (in days)
1	Initial Questionnaire	-
2	Second mailing	14
3	Third mailing	8

Before the third mailing, attempts were made to contact by telephone all nonresponders in order to explain the purpose of the questionnaire. Approximately 20 contacts were made and 13 additional returns were obtained.

Percent of Returns

Table 1 cites the rate of returns by contact number.

TABLE 1

RETURN RATE BY CONTACT NUMBER

CONTACT NUMBER									
Initial		1		2		3		Total	
N	%	N	%	N	%	N	%	N	%
104	100	26	25	14	13	13	13	53	51

Usable questionnaires were received from 51 percent of the study population. In order to check nonresponse bias, certain comparisons of responses grouped by contact numbers were made using chi-square analysis (Appendix C). The results of this analysis indicated that the data was representative of the entire study population.

RESULTS

The results of the study were cited in four sections that paralleled the four objectives of the study.

Personal and Demographic Characteristics of Students

Table 2 identifies the sex and marital status of the respondents.

TABLE 2

SEX AND MARITAL STATUS

ALL RESPONDENTS

	Male		Female		Total	
	N	%	N	%	N	%
Single	10	19	1	2	11	21
Married	27	51	13	24	40	75
Other	2	4	0	0	2	4
Total	39	74	14	26	53	100

The data indicated that 74 percent of the respondents were males and 26 percent were females. Approximately 75 percent of the students were either married males (51%) or married females (24%). Further analysis indicated that all 10 single males were enrolled in Law Enforcement 228.

Table 3 indicates how far the respondents lived from the College.

TABLE 3

DISTANCE FROM THE COLLEGE

Distance	N	%
Up to 2 miles	6	11
2-5 miles	12	23
6-10 miles	17	32
11-20 miles	15	28
21-30 miles	1	2
Over 30 miles	2	4
Total	53	100

Responses indicated that the majority of respondents (94%) live within 20 miles of the College.

Table 4 indicates the highest educational level of the respondents.

TABLE 4

HIGHEST EDUCATIONAL LEVELS OF THE RESPONDENTS

	N	%
Attended High School	2	4
High School Graduate	8	15
Attended College	38	72
Four-year College Graduate	4	7
Master's Degree or Higher	1	2
	53	100

Approximately 72 percent of the respondents have attended college with approximately 9 percent attaining four-year or higher degrees.

Table 5 identifies the primary educational goals of the respondents.

TABLE 5

PRIMARY EDUCATIONAL GOALS OF THE RESPONDENTS

Goals	N	%
Earn a certificate or diploma to improve employment and career skills	7	14
Earn an associate or higher degree	35	68
Increase general knowledge and level of education	8	16
Other (specify)	1	2
Total	51	100

The data indicated that approximately 82 percent of the respondents enrolled in the instructional radio courses to earn a certificate, diploma, or associate or higher degree.

Table 6 indicates the occupational status of the respondents.

TABLE 6

OCCUPATIONAL STATUS OF THE RESPONDENTS

Occupational Status	N	%
Full-time Students	4	9.0
Police Officer or Policeman	25	54.0
Housewife	3	6.5
Teacher	3	6.5
Other*	11	24.0
Total	46	100.0

*Includes clerks (3), nurse, assembler, technician, bank tellers.

The data indicated that 54 percent of the respondents (25) were employed in some aspect of law enforcement. This included police officers, detectives, and one deputy sheriff. A listing of all employers was cited as follows:

Commonwealth Appraisal Company

Franklin County Schools

General Electric

Kroger

Mountain Trust Bank

New River Electrical Corporation

Roanoke City Police Department

Roanoke City School Board

Roanoke Memorial Hospital

Salem Police Department

Thriftway Supermarket

U. S. Post Office

Veterans Administration

Veterans Hospital

Attitudes and Opinions of the Students

Table 7 cites the respondents' ratings concerning specific aspects of their experiences while enrolled in the instructional radio courses.

TABLE 7

RESPONDENTS' RATINGS OF
CERTAIN ASPECTS OF THE INSTRUCTIONAL RADIO COURSES

Aspect	Superior		Good		Fair		Poor	
	N	%	N	%	N	%	N	%
Academic Instruction	10	19	40	75	3	6	0	0
Course Interest	6	11	24	45	20	38	3	6
Instructor's Delivery	8	15	33	64	10	19	1	2
Usefulness of Text and Supplemental Materials	5	9	24	45	21	40	3	6
Grading of Students' Performance By Instructor	17	34	27	54	4	8	2	4
Length of Lectures	4	8	39	73	8	15	2	4
Usefulness of Break in Middle of Lecture	16	30	29	55	6	11	2	4
Registration Procedures	5	9	37	70	8	15	3	6
Testing Procedures	8	15	31	61	6	12	6	12
Availability of Instructor to Student	11	21	32	62	6	11	3	6
Technical Quality of Programs	11	21	40	75	1	2	1	2
Radio Reception	18	34	29	55	4	7	2	4

The data indicated that ratings were extremely high in terms of academic instruction, instructor's delivery, grading procedures, length of lectures, availability of instructor, technical quality of programs, and radio reception. Lower ratings for course interest, usefulness of text and supplemental materials and registration procedures were noted. Although there was no attempt to evaluate individual courses, recommendations for examining individual courses in terms of these aspects should be discerned in order to provide more effective learning experiences.

Table 8 indicates the respondents' opinions concerning the relationship of the radio course to their employment or study.

TABLE 8

RELATIONSHIP OF COURSE TO LATER EMPLOYMENT OR STUDY

Response	N	%
Yes, very much	19	37
Yes, somewhat	17	33
No, very little	9	18
Does not apply	6	12
Total	51	100

The data indicated that approximately 70 percent of the respondents expressed opinions that the radio was related to their later employment or study. This fact was supported in the large number of responses that indicated that their primary educational goal was to earn a degree, certificate, or diploma (Table 5).

Technical Aspects of Instructional Radio Courses

Questions 14-20 (Appendix A) identified respondents' opinions in terms of certain technical aspects of the instructional radio courses. Table 9 indicates the respondents' opinions for questions 14, 15, 16, 17 and 19.

TABLE 9

RESPONDENTS' OPINIONS ON CERTAIN TECHNICAL ASPECTS OF THE INSTRUCTIONAL RADIO COURSES

Question	Yes		No	
	N	%	N	%
14. Did you actually listen to the programs at the time of broadcast?	33	62	20	38
15. Did you utilize the Learning Lab to listen to the program?	11	24	35	76
16. Did you tape the program at home?	28	53	25	47
17. Was the broadcast time convenient?	33	62	20	38
19. Would repeat broadcasts be helpful?	41	77	12	23

The data indicated the following:

1. A significant number (38%) of students listened to the broadcast at other than initial broadcast times.
2. A significant number (24%) of students supplemented the radio broadcast by utilizing the Learning Lab to listen to the programs.
3. A significant number (53%) of students taped the lectures at home.
4. A significant number (38%) of students indicated that the broadcast times were not convenient, implying that repeat broadcasts with tapes available for check-out or use in the Learning Laboratory was both necessary and highly desirable.
5. A significant number (77%) of students indicated that repeat broadcasts were helpful.

Table 10 identifies the respondents' opinions concerning the time period that was most convenient for their daily schedules.

TABLE 10

MOST CONVENIENT BROADCAST TIME

Time	N	%
8:00 A.M. to Noon	14	27
12:01 P.M. to 6:00 P.M.	15	29
After 6:00 P.M.	23	44
Total	52	100

The data indicated that the most convenient broadcast time for the largest number of students was after 6:00 P.M. Other responses were approximately evenly divided between 8:00 A.M. to noon and 12:01 P.M. to 6:00 P.M.

Table 11 indicates the place that the respondents listened to the broadcasts.

TABLE 11

PLACE THAT RESPONDENTS LISTENED TO BROADCASTS

Place	N	%
Home	42	70
Work	10	16
Automobile	4	7
Other	4	7
Total	60	100

The data indicated that most respondents listened to the broadcasts at home with multiple responses noted by seven students. Several responses of "other" indicated Learning Laboratory and "all the above."

Comments and Opinions of Respondents

An open form or unrestricted type of question was used to call for a free response in the respondent's own words. Although the items were difficult to interpret, tabulate, and summarize, they were used to provide greater depth of response while possibly revealing both the respondent's frame of reference and the reasons for his responses. Appendix B cites many of these responses with the next section presenting discussion data and implications of the study observed by Mr. Chris Ryg, WVWR-FM Station Manager.

OBSERVATIONS AND COMMENTS
BY WVWR-FM STATION MANAGER

An important conclusion of this experimental period is that radio courses cannot stand alone as an instructional strategy. Radio courses must be linked closely with campus-based courses and with other present and proposed non-traditional (open learning) courses. Immediate consideration needs to be given to the restructuring of all non-traditional course offerings in order to better coordinate their development and maximize their utilization. Related to this is also a need to undertake an extensive consumer survey to determine the specific needs for non-traditional courses in Virginia Western's educational service area. In this way, a data base can be established for use in designing and targeting these courses. Non-traditional courses need to be properly planned and researched, produced with the highest technical quality, and thoroughly evaluated after utilization.

There needs to be a better method of coordinating the selection of radio instructors and the specific radio courses. The selection of courses will be greatly enhanced if we determine the specific educational needs in the community. The selection of instructors is also extremely important. Instructors must be chosen carefully so that they can take full advantage of the unique qualities of the radio medium. For instance, they must have no voice problem which could detract from the course material. Instructors must also be willing and able to do the extra preparation necessary for radio courses and be willing to do more with the radio courses than simply lecture. Instructors probably should be auditioned before being formally assigned a radio course. Perhaps most

important is the involvement of the staff of the radio station in the selection of courses and instructors. The radio staff can supply valuable technical experience in these areas and should be consulted. This selection process needs to be a thorough procedure to insure the future success of radio instruction.

The selection of courses should also be influenced by the interests of WVWR's general audience. We have found that there are many regular listeners who listen to the radio courses for their own interest. If the courses can be selected and designed to appeal to a general audience as well as to the student audience, additional benefits can be identified. Fortunately, the courses that have been offered to date have had this appeal to regular listeners. We have also found that the courses are of more interest to listeners if there are references to contemporary events that relate to the course material. In addition, we have found that there is listener interest in the creation of non-credit educational radio programs similar to the recently produced "Natural History Travels" with two Virginia Western faculty members. Because of this interest, the Continuing Education Department may become interested in creating a series of noncredit radio programs. While there appears to be a need for specialized radio courses (law enforcement, mental health, etc.), attention needs to be given to the effect these courses will have on the listening habits of the general audience. The programming of specialized courses on the SCA "side channel" could avoid tune-out by the station's regular listeners.

The courses presented have not attracted a large enrollment, but there appears to be several reasons to explain the small enrollment. The lack of "audience targeting" data has undoubtedly had a large effect, but there also

seems to be a lack of understanding of the purpose of the radio courses among faculty, administration, and students. This fact has caused the radio courses to not be closely tied to existing classroom courses and other non-traditional course offerings. In addition, there is a need to promote and insure utilization of these courses. The need for more public information on the radio courses is obvious. More publicity needs to be given to radio courses with greater student encouragement given by counselors and faculty advisors. The increase in WVWR's coverage area may promote greater enrollment by pulling students from other community colleges.

For the most part, the radio instructors have worked well with the radio medium and the staff of the station. Since the radio instructors learned a great deal about radio instruction, most would probably want to retape their courses before rebroadcasting. The instructors feel that they would undoubtedly be able to produce better courses in the future. At first, the instructors had difficulty adjusting to the radio medium. This was because of the studio environment, lack of student feedback and discussion, and the greater preparation time required to teach the course. The instructors made several suggestions to improve their participation in radio courses which are enumerated as follows:

1. It is important for the radio instructor to have taught the particular course before;

2. More preparation time is required for radio courses than for classroom courses;

3. Some thought the 60-minute broadcast was too long and might be cut down to 30 minutes without any loss of course content;

4. Advance taping of some courses does not permit reference to contemporary issues that are an important part of some courses such as government;

5. There was inadequate publicity on the radio courses as well as a lack of student encouragement;

6. There needs to be radio receivers available on campus for students.

A significant deficiency we identified was a lack of station staff support to the instructors. There is no question that more technical assistance in the programming and production of the courses could have been helpful to the instructors and the course presentation. However, the staff did not have adequate time to work closely with the instructors because of their other ongoing responsibilities. The instructors would probably have found it helpful to have one person available to assist them in the instructional design, production, and utilization of the courses. The proposal for the regional radio consortium recommends the employment of an instructional designer with the title of Instructional/Educational/SCA Coordinator. This person could provide adequate logistical support to the instructors and insure proper utilization of course materials. In addition, this person would insure coordination of educational and instructional materials developed by the consortium members.

The completed student survey forms indicate that there is a need in the community for instructional radio courses. Generally, the comments indicate an interest in a continuation of this activity, but suggest some changes. Some students had difficulty adjusting to the radio courses and felt there was not enough interaction between them and the instructor. As we predicted, we did appear to have reached some students who would not

normally have taken the course on campus. In addition, the law enforcement students' comments point out the need for additional courses that can be designed for a specific occupational or professional group. The area of inservice training needs to be more fully explored. We have excerpted some of the students' comments which are attached. (Appendix B).

Student and instructor comments suggested a need to improve student feedback and student-instructor interaction. The radio instructors did attempt to maintain contact with their students, but perhaps this contact needs to be more formalized. Some instructors prepared rather extensive course outlines and other printed material which helped their students become more fully involved in the course. Some instructors also made periodic mailings to their students. (Some radio courses at other institutions have included mailings of slides and other visual materials to enhance the course material.) Printed and visual materials are essential for radio students since they do not have ready access to the instructors. Instructors should perhaps call their students occasionally during the quarter if enrollment is small enough to make this possible. Consideration might also be given to holding a seminar once a month either on campus or in the community. There are other possibilities to improve interaction and we must fully explore this important area with the instructors.

Summary of Observations

Much has been learned about the potential of instruction by radio in the last two years. There is no doubt that radio courses can augment traditional courses on campus and be of benefit in fulfilling the college's instructional and community service objectives. However, it is apparent that we have some problem areas which need to be attended before we can fully take advantage of the radio medium's potential. The most serious problem is the apparent lack of coordination of non-traditional course offerings and the absence of an efficient method of selecting courses and instructors. It is hoped that these problems can be solved before the expected formation of a regional radio consortium with other community colleges.

SUMMARY AND RECOMMENDATIONS

Summary

The study examined the characteristics, opinions, and attitudes of students enrolled in the instructional radio courses offered at Virginia Western Community College. Four major objectives were identified as follows:

A. To identify selected personal and demographic characteristics of students who enrolled in courses offered by radio.

B. To study the attitudes and opinions toward instructional radio courses.

C. To discern certain technical aspects of instructional radio courses.

D. To identify all comments and opinions that the students cared to make about their courses of study.

The study population consisted of 104 students who had enrolled in the instructional radio courses. The survey instrument consisted of a questionnaire (Appendix A) developed by VWCC's Office of Institutional Research with special inputs from Chris J. Ryg, WVWR-FM Station Manager. The procedures of the study consisted of three mailing contacts with approximately 51 percent rate of returns. In order to check nonresponse bias, certain comparisons of responses grouped by contact number were made using chi-square analysis (Appendix C). The results of these analyses indicated that the data was representative of the entire population.

Results of the survey were summarized as follows:

1. Approximately 75 percent of the students were either married males (51%) or married females (24%).

2. Approximately 94 percent of the respondents live within 20 miles of the College.

3. Approximately 72 percent of the respondents have attended college with approximately 9 percent attaining four-year or higher degrees.

4. Approximately 82 percent of the respondents enrolled in the instructional radio courses to earn a certificate, diploma, or associate or higher degree.

5. Approximately 54 percent of the respondents were employed in the fields of law enforcement.

6. The respondents indicated extremely high ratings for the following aspects of the instructional radio courses: academic instruction, instructor's delivery, grading procedures, length of lectures, availability of instructor, technical quality of programs, and radio reception.

7. Approximately 70 percent of the respondents expressed opinions that the radio course was related to their later employment or study.

8. A significant number (38%) of respondents listened to the course broadcasts at other than initial broadcast times.

9. A significant number (24%) of the respondents supplemented the radio broadcast by utilizing VWCC's Learning Laboratory to listen to the programs.

10. A significant number (53%) of respondents taped the lectures at home.

11. A significant number (77%) of respondents indicated that repeat broadcasts were helpful.

12. The most convenient broadcast time for the largest number of respondents (44%) was after 6:00 p.m.

13. Most respondents (70%) listened to the broadcasts at home with multiple responses noted by seven students.

14. Appendix B cited many of respondent's opinions and attitudes as requested in the open form question.

The study concluded with comments, observations, and opinions by WVWR-FM Station Manager.

Recommendations

Instruction by radio can be improved by attention to some of the problem areas identified by this evaluation. The increase in WVWR's power to serve an expanded regional audience can provide a larger potential student enrollment. However, the responsibility of providing valid instructional programming also becomes greater. The following recommendations are based on this evaluation as well as the experiences of the radio instructors and the radio station staff.

1. Consideration should be given to the restructuring of non-traditional course offerings at Virginia Western to insure interface of course formats, proper program design, full-utilization and evaluation, and cost effectiveness;

2. The selection of courses and instructors should be better coordinated and a more thorough process;

3. A consumer survey should be undertaken to determine the specific needs in the community for non-traditional course offerings. This will create a data base so that limited resources can be directed into productive areas;

4. Consideration should be given to creating an informational campaign to promote utilization of non-traditional course offerings including the radio courses;

5. More consideration needs to be given to the development of in-service training programs and the use of the SCA channel;

6. Consideration needs to be given to the problem of a lack of student-instructor interaction with radio courses;

7. Consideration should be given to shortening the radio broadcasts;

8. Another follow-up evaluation of radio instruction should be undertaken in about two years to determine future direction.

APPENDICES

APPENDIX A

QUESTIONNAIRE

Dear Former Student:

Virginia Western Community College (VWCC) is most interested in how you feel about your experiences while enrolled in courses offered by our educational radio station. Therefore, you are asked a number of questions about your background, opinions, and reasons for enrolling in these courses. This information will be used in developing improved programs and services with your personal responses treated as confidential. Thank you for your invaluable assistance in assessing VWCC's strengths and weaknesses in this program of study.

1. Name _____
2. Mailing address _____
3. Occupation _____
4. Employer _____

ANSWER EACH QUESTION BY WRITING THE APPROPRIATE NUMBER OR MAKING THE APPROPRIATE CHECK IN THE BLANK SPACES. SHOW ONLY ONE ANSWER FOR EACH QUESTION.

____5. Marital Status
1 Single or engaged
2 Married
3 Other

____6. How far is the college from where you live?
1 Up to 2 miles
2 2 - 5 miles
3 6 - 10 miles
4 11 - 20 miles
5 21 - 30 miles
6 Over 30 miles

____7. Show your highest educational level.
1 Under 8 years
2 Completed 8th grade
3 Attended high school
4 High school graduate
5 Attended college
6 Four-year college graduate
7 Master's or higher degree

____8. Identify the radio course you were enrolled in.
1 History 101-102-103
2 Law Enforcement 228
3 Government 180
4 English 271
5 Music 121

____9. Did you complete the course of study? 1 Yes 2 No

10. Please give your opinion about each of the following aspects of your experiences while enrolled in the radio course.

	Superior	Good	Fair	Poor
a. academic instruction	☐	☐	☐	☐
b. course interest	☐	☐	☐	☐
c. instructor's delivery	☐	☐	☐	☐
d. usefulness of text and supplemental materials	☐	☐	☐	☐
e. interest in students shown by instructor	☐	☐	☐	☐
f. grading of students' performance by instructor	☐	☐	☐	☐
g. length of lectures	☐	☐	☐	☐
h. usefulness of break in middle of lecture	☐	☐	☐	☐
i. registration procedures	☐	☐	☐	☐
j. testing procedures	☐	☐	☐	☐
k. availability of instructor to student	☐	☐	☐	☐
l. technical quality of programs	☐	☐	☐	☐
m. radio reception	☐	☐	☐	☐

____11. Was this course related to your later employment or study?
1 Yes, very much
2 Yes, somewhat
3 No, very little
4 Does not apply

____12. Would you enroll again for instruction by radio?
1 Yes
2 No (Specify)
_____
_____

____13. What was your primary educational goal by taking this course?
1 Earn a certificate or diploma to improve my employment and career skills.
2 Earn an associate degree or a higher degree.
3 Upgrade technical knowledge and skills in specific fields by taking just one or two courses.
4 Increase my general knowledge and level of education.
5 Other (Specify) _____
_____
_____

___14. Did you actually listen to the programs at the time of broadcast?
1 Yes
2 No

___15. Did you utilize the learning lab to listen to the programs?
1 Yes
2 No

___16. Did you tape the programs at home?
1 Yes
2 No

___17. Was the broadcast time convenient?
1 Yes
2 No

___18. Specify the broadcast time most convenient for your daily schedule.
1 8:00 a.m. to noon
2 12:01 p.m. to 5:00 p.m.
3 after 6:00 p.m.

___19. Would repeat broadcasts be helpful?
1 Yes
2 No

___20. Where did you listen to the broadcasts?
1 home
2 work
3 automobile
4 other (Specify) _____

21. We would appreciate any comments you care to make about this course of study.

Comments: _____

APPENDIX B

OPEN FORM RESPONSES

1. I was very pleased with my experience, it encouraged me to take more courses through the College. I would like to see more radio courses broadcasted during the year for college credit.

2. Need more classes available on radio for working students. When a family member can tape them it's quite convenient.

3. Just that I found it difficult to study at home where there are too many interruptions. I also had some problem with outside reading since I am so far from the campus. But it was great to be learning and studying again. Even when I was not taking the course for credit, it was stimulating - a wonderful thing in the midst of all the soap operas and quiz shows. Please keep it up.

4. I feel that the LWNF programs are good simply because it gives the student a chance to earn credits without actually attending class and it gives the general public (not students) a chance to become more familiar with law enforcement - Handout material related to the broadcast subject should be made available.

5. Gives an individual the opportunity to take a course that he might otherwise be forced to forego.

6. The lack of personal contact with instructors is possibly the greatest drawback. You cannot ask questions at the time when you need them answered to better understand the material that follows.

7. I am very much in favor of this method of obtaining college credits and furthering my education. It should be publicized more and will gain interest, I am sure, from persons who otherwise could not take advantage of attending college.

8. In my opinion, it is an excellent idea to have educational radio programs for all the reasons listed in item #13. I would like to take another course by radio.

9. I feel seminars should be held in order to meet other students and professors - maybe 2 during the quarter. I was most pleased with the course. I'm now taking U.Va.'s program on T.V. on Learning Disabled Children - 5 seminars will be held in this course.

10. I feel that this course of study is very beneficial in that it is very convenient for those who can't get out and come to school all of the time for one reason or another. Also such as in my case I could listen to the repeat broadcast on Saturday morning which enabled me to take an extra hour that could be transferred to VPI where I am graduating in June. Without the radio broadcast it would have been difficult to achieve the number of credits required for graduation this June. I think this is a fine program and should be continued but on a wider variety of subjects.

11. I would like to see more study material be given out before class lectures, so as to have a study guide to follow along with.

12. I wish you could offer more of these radio study courses. One can relax in his own home and learn easier.

APPENDIX C

NONRESPONSE BIAS

To check nonresponse bias, comparisons of selected characteristics were made among the three mailing contacts. Chi-square values and levels of significance were reported.

Marital Status

	1st Contact	2nd Contact	3rd Contact
1 Single, engaged, or other	6	2	5
2 Married	22	11	7
Total	28	13	12

X^2 (2 d.f.) = 2.636; $p > .05$.

Highest Educational Level

	1st Contact	2nd Contact	3rd Contact
1 High school graduate or less	5	4	1
2 Attended college	18	9	11
3 Four-year college graduate or higher degree	5	0	0
	28	13	12

X^2 (4 d.f.) = 7.0541; $p > .05$.

Course Completion

	1st Contact	2nd Contact	3rd Contact
1	24	8	11
2	3	5	1
Total	27	13	12

X^2 (2 d.f.) = 5.464; $p > .05$.

Course Relatedness to Later Employment or Study

	1st Contact	2nd Contact	3rd Contact
1 Yes, very much	10	3	6
2 Yes, somewhat	7	6	4
3 No, very little	7	2	0
4 Does not apply	3	2	1
Total	27	13	12

X^2 (6 d.f.) = 5.9492; $p > .05$.

Opinions Concerning Enrolling Again For Instruction By Radio

	1st Contact	2nd Contact	3rd Contact
1 Yes	23	11	7
2 No	3	3	5
Total	26	14	12

X^2 (2 d.f.) = 4.4692; $p > .05$.

Primary Educational Goal

	1st Contact	2nd Contact	3rd Contact
1 Earn a certificate or diploma to improve my employment and career skills.	4	2	11
2 Earn an associate degree or a higher degree.	15	9	0
3 Increase my general knowledge and level of education.	0	0	0
Total	25	13	11

X^2 (4 d.f.) = 27.2382; $p < .05$.

This significant chi-square indicated that students enrolled in degree programs responded more frequently to telephone appeals. Although telephone appeals were made to all nonresponders, successful attempts were more likely in terms of subjects enrolled in the law enforcement course. Further chi-square analysis for the first and second contacts revealed no significant differences with X^2 (2 d.f.) = 0.4189.

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LOS ANGELES
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